

# Technical Report Documentation Page

1. Report No.  FHWA-RD-01-0077	2. Government Accession No.	3. Recipient's Catalog No.	
4. Title and Subtitle  HYDRAULICS OF SLOPE-TAPERED PIPE CULVERTS		5. Report Date	
		6. Performing Organization Code	
		8. Performing Organization Report No.	
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		11. Contract or Grant No.  DTFH61-95-C-00066	
		13. Type of Report and Period Covered  Final Report 1996-1998	
12. Sponsoring Agency Name and Address  Office of Infrastructure Research and Development Federal Highway Administration 6300 Georgetown Pike McLean, VA 22101-2296			
		14. Sponsoring Agency Code	
15. Supplementary Notes  Contracting Officer's Technical Representative (COTR): J. Sterling Jones, HRDI			
16. Abstract  This report updates the Iowa Department of Transportation (DOT) design procedures for circular, slope-tapered concrete culverts. The current practice is to use the design coefficients for a square-edged, circular concrete culvert with a headwall that are found in Hydraulic Series No. 5 (HDS-5). New inlet control design constants and entrance loss coefficients were calculated for the slope-tapered culverts and then compared with the HDS-5 coefficients (square edge). In addition, various reducer lengths and taper ratios were also studied to determine what impact, if any, they have on the design coefficients. All of the laboratory testing was done at the Federal Highway Administration's Turner-Fairbank Highway Research Center located in McLean, Virginia.			
17. Key Words  Culverts, culvert design coefficients, inlet control, outlet control, hydraulic design		18. Distribution Statement  No restrictions. This document is available to the public through the National Technical Information Service, Springfield, VA 22161.	
19. Security Classif. (of this report)  Unclassified	20. Security Classif. (of this page)  Unclassified	21. No. of Pages  103	22. Price